Palmetto Priority Schools Evaluation

Introduction

The Palmetto Priority Schools (PPS) project is an intensive long-term collaboration initiative with 16 schools that have not met student learning goals mandated in the South Carolina Education Accountability Act. The initiative was approved by the State Board of Education as an alternative to "a State takeover" of the schools, which have extremely high numbers of economically disadvantaged students, that have been rated as "below satisfactory" and did not make "expected progress" for three consecutive years. The procedural guidelines for monitoring expected progress were established by a recommendation of the State Board of Education (SBE) in 2004— S.C. Code Ann.§ 59-18-1520—and are as follow:

Beginning with the November 2003 report card, any school that receives an absolute report card rating of unsatisfactory will be monitored to determine if expected progress is being met.
Both of the following criteria must be met to demonstrate expected progress.

Criterion One: Attain a minimum absolute value of 1.8 and
Criterion Two: A) Increase the school's absolute value .3 of a point, or
B) Improve the absolute rating at least one level.

Schools must continue to increase .3 of a point for each two-year period until the absolute rating is higher than the unsatisfactory category.

The Education Oversight Committee established an agreement with the SC Department of Education to evaluate the Palmetto Priority Schools project. The evaluation aims to achieve the following objectives:

Within five academic years, in the Palmetto Priority Schools[1]

1. At least 75 percent of students in each school will score Basic or above on state standards-based assessments;
2. At least 50 percent of eighth graders will score Proficient or above on state standards-based assessments;
3. At least 75 percent of each high school's 2008 entering ninth grade class will graduate on-time;
4. Each school will achieve an absolute performance index of 3.3 or higher on a 5.0 scale.

Design Focus

One part of the evaluation design focuses on data that are routinely reported by the school districts to the SC State Department of Education. The other part of the design, which focuses on primary data collection in a subsample of the 16 schools for spring 2008-2011, postulates that student academic performance has four sources:

[1] This is the conclusion of the 2011-2012 school year for the 16 schools designated as Palmetto Priority Schools in spring 2007.

1. **Home environment**—encompasses structural characteristics (e.g., SES, racial/ethnic composition, residential patterns), parental involvement in education, parent-child interactions, neighborhood characteristics, parent psychological distress, and religiosity.
2. **School climate**—teacher expectations and beliefs about student achievement, administrative leadership, resources, institutional support, the degree of collegiality within the school (e.g., teachers, counselors, course specialist), teacher job satisfaction, degree of teacher responsibility for student outcomes, teacher classroom management, and the amount of institutional change in recent years.
3. **Student motivation for learning**—academic efficacy and aspirations, school engagement, and motivation for learning and achievement.
4. **Health status**—chronic illnesses, symptoms of distress (e.g., sleep difficulty, feelings of anxiety/depression, eating problems, agitation, and physical problems), and mental health issues.

Background and Significance

Although we know that all of the PPS schools are rated "below satisfactory" and are plagued by high rates of poverty, we know very little about other relational factors that may contribute to their unfortunate status. Past research has clearly documented that economically disadvantaged children are more likely to earn lower grades, score lower on achievement tests, and suffer from socioemotional problems such as depression and anxiety than those from more affluent families (e.g., Brooks-Gunn & Duncan, 1997; Conger, Ge, & Elder, 1994; Cooper & Crosnoe, 2007; Mcloyd, 1998). They also are more apt to be placed in special education programs and lower curricular tracks, retained or drop out of school, and less likely to receive a high school diploma. These negative effects are more pronounced for African American than Euro-American children (Children's Defense Fund, 2003; Huston, 1999; Jargowsky, 1994; Mcloyd, 1998). To explain these associations, researchers have consistently focused on either the home or school environment. Seldom are both environments assessed in a single study, and even fewer utilize a longitudinal approach to examine the effects of continuities/discontinuities in home and school environments on children's cognitive and socioemotional functioning.

The present evaluation examines the effects of home and school environments on the academic performance of a subsample of the PPS middle and high school students. The goal is to determine if and to what extent each environment contributes to student achievement. The evaluation also assesses whether continuity or discontinuity in the environments is significantly affecting student performance, and if so, which factors within the environments are most important for enhancing student achievement over time. Due to the complex nature of the environments that will be assessed, the evaluation design calls for an intensive, longitudinal, mixed-method approach that will use a variety of data sources in order to adequately investigate the independent relations of schools and families to student academic performance.

The wealth of data collected allows us to "triangulate" data and information—an evaluative technique in which qualitative and quantitative data from multiple sources are brought together to enhance the credibility of evaluation findings and provide a richer and more insightful portrayal of the multiple dynamics and outcomes from a project (NSF, 2002). This part of the evaluation contributes to extant literature in that it focuses on understanding the processes by which various home and school indicators affect student academic

performance rather than simply highlighting correlates of their economic status. In the following section, we briefly review the key literature of the four sources noted above as contributors to student academic performance.

1. Home Environment

The results of numerous studies converge in showing that economic hardship indirectly affects children's academic performance through its impact on parenting behavior (Brody, Stoneman, & Flor, 1995; Brooks-Gunn, Duncan, & Maritato, 1997; Conger, Conger, & Elder, 1997). Parental child rearing practices and behaviors are influenced by their beliefs about the way children develop (Himelstein, Graham, & Weiner, 1991; Miller, 1988), and the goals and expectations that they have for children (Darling & Steinberg, 1993; Harwood, Schoelmerich, Ventura-Cook, Schulze, & Wilson, 1996; Hess, Price, Dickson, & Conroy, 1981; Rothstein, 2004). Past research has documented that parental aspirations and perceived efficacy enhance children's own sense of efficacy and academic aspirations (Betz & Hackett, 1986; Bong, 2004; Lent, Brown, & Hackett, 1994). In essence, children who have strong beliefs in their academic efficacy consider more occupational options as a possibility. They also are more likely to show a greater interest in the occupations, put forth an effort to prepare themselves educationally for different career pursuits, and to persist and succeed in their academic coursework.

Parents who have high educational aspirations for their children and believe they can contribute to their realization can also affect their children's cognitive development independently of their impact on their children (DePlanty, Coulter-Kern, & Duchane, 2007). One way this can be accomplished is for parents to ensure that teachers are well aware of the importance they place on education by advocating on behalf of their children in relation to the school system. Indeed, teachers are more likely to be committed to children whose parents are more involved in their educational process, and the educational impact of parents is more pervasive if the influence is exerted via teacher expectations for student achievement rather than simply mediated through parental effects on children (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996).

Past research has documented that economic disadvantage and loss diminish parents' capacity to be supportive, consistent, and involved in their children's lives, and parental psychological distress derived from an excess of negative life events and undesirable living conditions mediate the link between economic hardship and parenting behavior (e.g., Conger, Conger, Elder, Lorenz, Simons, & Whitbeck, 1992; Elder, Liker, & Cross, 1984; Elder, Nguyen, & Caspi, 1985; Gutman & Eccles, 1999; Mistry, Vandewater, Huston, & McLoyd, 2002). These relations are much more pronounced for African American children whom are more likely to experience persistent economic hardship (Brody & Flor, 1998; Duncan & Rodgers, 1988; Proctor & Dalaker, 2003). Most of the studies highlighting the effects of persistent economic hardship (i.e., poverty) have been conducted in rural and suburban areas. The present evaluation fills an important gap in the literature because students in urban schools make up more than half of the subsample from which primary data are collected.

2. School Climate

Extant literature has clearly documented that teachers play a key role in student achievement (e.g., Chenoweth, 2007; College Board, 2002; Lawrenz, Huffman, & Robey,

2003) and teacher characteristics, teaching practices, and level of professional development in classroom management have been shown to be extremely important in distinguishing between effective versus ineffective teachers (Burton, Whitman, Yepes-Baraya, Cline, & Kim, 2002). Teachers who use hands-on learning, emphasize higher-order thinking skills in instruction, and have participated in professional development classes in teaching diverse students tend to have substantially higher-achieving students (e.g., Love, 2005; Wenglinsky, 2000; Willis, 1998). In addition, students have been shown to learn more from teachers with good basic skills test scores (Ferguson, 1991), high verbal skills (Ballou & Podgursky, 1997), and a major or minor in the field in which they teach (Fetler, 1999; Goldhaber & Brewer, 1999; Monk, 1994; Wenglinsky, 2000). Research also has shown effective teachers to be those who have specific, pedagogically relevant content expertise that includes knowledge of how best to elucidate concepts and demonstrate methods (Brownell, Furry, & Hecsh, 2001). Moreover, effective teachers tend to have instructional practices that emphasize thinking and reasoning, problem solving, the importance of concept development, and are flexible enough to accommodate students who have different learning styles (VanTassel-Baska, Feng, & McFarlane, 2006).

In addition to the relations between teacher background characteristics, classroom management, job satisfaction, and the quality of teaching practices, past research has shown school quality, in terms of the structure, goals, educational philosophy, leadership, disciplinary policies, responsiveness to different cultures, and overall school climate, to be important indicators of student performance (Chenoweth, 2007; Kenu & Rimpela, 2002; Mac Iver, 1990; Mizelle, 1999; Morgan and Hertzog, 2001; Riley & Nuttall, 1994). Although we know that school quality factors are more likely to exert influence on student performance indirectly through teachers and classrooms, it is important to know how these factors operate and affect student learning. Thus, in addition to teacher interviews, primary data collection for this evaluation includes interviews with administrators about resources available to teachers, financial support by the district, availability of necessary equipment for classes; requirements for, and selectivity in, curricular tracks; policies and practices associated with science, math, social studies, and English/language arts classes; and interactions with parents, students, and teachers.

3. Student Motivation

A major part of children's academic performance is mediated through the socialization practices of their parents. However, children's own academic efficacy and aspirations also are important contributors to their academic outcomes. Previous research has shown that children who believe they can exercise some control over their own learning and mastery of coursework tend to have better academic performance than those who do not have such beliefs (Bandura, 1993; Zimmerman, 1995). Individuals with stronger self-efficacy beliefs and expectations experience better career, academic, and life outcomes in general (Close, 2001; Lent, Brown, & Hackett, 1994; Torres & Solberg, 2001).

Studies of student motivation to learn indicate that after controlling for student cognitive ability, the more students believe they are academically competent and can develop their abilities or intelligence through effort, the more likely they are to approach, persist at, and master moderately challenging academic tasks (e.g., Bandura, 1997; Dweck & Leggett, 1998). Second, student motivation studies have documented that the more students find an academic subject intrinsically interesting and important with respect to other goals or

values, the more likely they are to invest in learning the subject and to choose related-courses and activities in the future (e.g., Eccles, 1998; Schiefele, 1991). Third, studies of academic goals have demonstrated that student orientation toward the goals of mastery and self-improvement are closely tied to the use of deep processing and effective problem-solving strategies when learning (e.g., Dweck & Legett, 1998; Midgley, 1993). Eccles and colleagues (1998) maintained that core types of psychological phenomena—student academic competence related beliefs, academic values, and academic goals—can be the basic motivational building blocks that underlie patterns of academic engagement in the classroom. Therefore, the primary data collection part of the present evaluation examines these motivation building blocks in the sample of PPS project students to determine their effects on the student academic performance.

4. Health Status

Economically disadvantaged students are at much greater risk for negative outcomes in physical and mental health, and they face many ecological barriers and restraints that keep them from achieving their true potential (Brooks-Gunn & Duncan, 1997; McLoyd, 1998). Given the number of children who are at risk because of economic circumstances, it is important that we identify the processes through which family economic status might affect student achievement. This is especially true for students in the PPS project who are at-risk for both low economic status and academic performance. Therefore, this evaluation examines the mental and physical health status of the PPS students to determine their effects on student engagement in school and overall academic performance.

Overall Research Design

As noted above, this evaluation utilizes data from all sixteen schools that are reported by the districts to the SC Department of Education. Primary data are collected in English/language arts, math, science, and social studies classes in four schools (two each of middle and high schools), which are located in urban and rural areas, to provide an in-depth assessment of various factors in home and school environments that affect student academic performance.

Scope of Data

The PPS evaluation collects data to use in exploring the influences of both the individual attributes of adolescents and the attributes of their home and school environments on their academic performance. Data collection includes the following:

Parents/Primary Caregivers are interviewed in the school, home, or mutually decided on location (e.g., church, community center, etc) about the following:

- education and employment
- household income and economic assistance
- parent-adolescent interaction and communication
- parent's familiarity with the adolescent's friends
- involvement in education
- academic efficacy
- educational aspirations for children
- perceived stress and emotional support
- neighbor characteristics
- health-affecting behaviors

Students are asked to complete surveys on these indices:

- beliefs about their classroom activities
- perceived family support
- connections with teachers and peers
- academic motivation, efficacy, and aspirations
- attitudes toward school
- engagement and effort in school

Teachers are interviewed and asked to respond to questionnaires on the following attributes:

- sense of efficacy
- beliefs about student achievement
- classroom management
- interactions with students
- job satisfaction
- descriptions of instructional materials and their use in the target section
- content and pedagogy instructional decisions and factors that influence them
- changes in policies and practices that have an effect on course instruction
- school leadership, resources
- school climate—school leadership and resources, institutional support of staff, the degree to which beliefs about education are shared by other teachers, the degree of collegiality within the school, perceptions of their responsibility for student outcomes, extent of control they have within the school and/or classroom, and the amount of institutional change in recent years and its effects on student and staff outcomes.

School level administrators are interviewed to learn about specific policies and practices at the state, district, and school levels that bear on math, science, and English/language arts curriculum practices (e.g., who gets taught by whom, why, and to what effect?)

- ***Principal and/or Vice-Principal***—asked to describe course curriculum and how curriculum decisions are made in the subject areas of math, science, and English/language arts (i.e., decisions about course content, curriculum guidelines, and textbooks). Also, interviews assess adequacy of resources for course instruction and characterize any important changes in curriculum policy and practice, the source of those changes, and their possible effects on student achievement.
- ***Department chairs***—interview protocol asks about department resources, teacher qualifications, and oversight of instruction. Also, asked how students are assigned to courses, how teachers are assigned to courses, and strengths and weaknesses of the department's program.
- ***School counselors***—interview includes questions about how students are assigned to courses and the role of student choice in the process; if tracks exist in the school and to characterize them; and to explain how the curriculum differs for and how students are assigned to them. Also asked to characterize the nature of the student body at their school according to student ability and behavior.

District level administrators are interviewed to determine understanding of district and state initiatives and how they are passed on to schools.

- ***Assistant Superintendent for Curriculum***—interview protocol focuses on district polices and the district's implementation of state policies in the areas of middle and high school math, science, and English/language arts. Respondents are asked to describe how decisions are made about curriculum, including curriculum frameworks, textbooks, and testing; characterize changes in state and district policies and practices and their effects on students, teachers, and administrators; and provide an overview of staff development programs in math, science, and English/language arts.
- **Math, science, and English/language arts specialists**—asked to characterize the programs of instruction in their areas; respond to questions concerning changes at the district level for course requirements, course content, textbooks, guidelines, and testing; and to describe how their efforts influence student achievement and any evidence for such effects.
- **Testing directors**—asked to describe in detail the nature, purpose, and effects of district and state testing programs; how programs influence placement of students, course offerings, and course content/instructional practices; and to provide examples and sources of evidence to support responses.

Other data, which are reported to the SC Department of Education, are utilized on attributes such as these:

Students

- mental health status
- chronic and disabling conditions
- end of course tests and credits earned
- performance on end of grade tests
- average school attendance
- performance on Palmetto Achievement Challenge Tests (PACT)*
- enrollment in high school credit courses*
- performance on High School Assessment Program (HSAP) exam**
- enrollment in AP classes**

School Level

- absolute school rating
- adequate yearly progress
- performance trends over 4-year period
- percent of students scoring 70 or above on end of course tests
- retention rate

* Data are collected from middle school students

** Data are collected from high school students

- attendance rate
- allocation of PPS expenditures
- performance of PACT by group for 4 courses*
- percent of student enrolled in high school credit courses*
- High School Assessment Program (HSAP) exam passage rate**
- HSAP passage rate by spring 2006**
- graduation rate**

Teachers***

- educational attainment
- teachers with advanced degrees
- continuing contract teachers
- classes not taught by highly qualified teachers
- teachers with provisional certificates
- teachers returning from previous year
- attendance rate
- average salary
- professional development days

School Level

- principal's years at school
- student-teacher ration in core subjects
- prime instructional time
- dollars spent per pupil
- percent of expenditures for teacher salaries
- percent of expenditures for instruction
- parents attending conferences
- percent of classes not taught by highly qualified teachers
- student attendance
- analysis of partnership relationships and activities between the PPS districts/schools and area universities/colleges

District Level

- initiatives and PPS improvement plans
- percent of classes in low poverty schools not taught by highly qualified teachers
- percent of classes in high poverty schools not taught by highly qualified teachers
- student attendance

In each district, teachers, assistant superintendent (s) for curriculum, course specialists (math, science, language arts, and social studies), directors of testing, research, and staff

* Data are collected from middle school students

** Data are collected from high school students

*** Data are collected at the individual and school level

development are candidates for interviews. The following are among the types of evaluation techniques that are employed:

- Surveys of students and parents/primary caregivers.
- Classroom site visits and observations.
- Document analyses: report cards end of course assessments, etc.
- Interviews with PPS middle-school students, teachers, principals, and counselors. Group interviews and/or focus groups will be utilized for cost-efficiency.

Evaluation Schedule

The start date for this evaluation is upon completion and approval of the design. With the Year 1 published report due in the spring 2009, much needs to happen quickly in order to meet the deadline. Initial contacts have been made to facilitate meetings with district/school leaders, and before the end of the month, we will have access to data that are reported to the SC Department of Education. These activities provide a basis for developing the baseline profile for each school. They also give us the opportunity to 1) begin preliminary analyses; 2) know what types of data and information are available for the spring report to the SC Department of Education; 3) develop a narrative for each school, and 4) begin developing an assessment instrument to collect future PPS data to ensure that all schools provide basically the same data in the same type of format to facilitate our review and analysis in subsequent years.

Within the next couple of weeks, an advisory panel of experts will be established who will serve as a valuable resource that we will call upon throughout the PPS evaluation. We also will contact either universities/colleges or retired teacher organizations that are in close proximity to the respective PPS schools to contract for research assistants to collect data from the schools in the spring.

The EOC will prepare a letter to send to the principal or Palmetto Priority Schools Coordinator of each school. The letter provides a description of data collection activities that will be done over the course of the evaluation and highlights data needed during the first three months of the evaluation. In the upcoming months, the PPS evaluator will visit all of the schools to discuss the project and data collection. Noted below are the timelines for which data are collected and reported.

Timelines/Schedule of Deliverables

Task	Delivery/Task Completion Date
Convene evaluation advisory group	December 6, 2007
Contract for extra-EOC services	December 10, 2007
Interviews with parents	
Interviews with teachers and school administration	
Initial analyses of student, teacher and parent survey data	December 14, 2007
Meet with leadership in each school and district	December 17, 2007
Establish working relationships	
Develop narrative for each school	
Develop baseline profile for each school	December 21, 2007
Primary data collection in sample schools	Jan 4—Apr 4, 2008
Year One Interim Report to SBE	March 2008
Analyze Year One performance and profile data and primary data collection	August 1, 2008
Meet with leadership in each school and district to review Year One profiles/leadership at SDE[1]	September 12, 2008
Establish working relationships	
Develop narrative for each school	
Modify data collection and evaluation strategies based on Year One	September 19, 2008
Publish Year One Report	September 26, 2008
Year Two Interim Report to SBE	March 2009
Analyze Year Two performance and profile data/ primary data collection	August 7, 2009
Meet with leadership in each school and district to review Year Two profiles/leadership at SDE	September 11, 2009
Re-establish working relationships	
Review developed narrative for each school	
Modify data collection and evaluation strategies based on Year Two	September 18, 2009
Publish Year Two Report	September 25, 2009
Year Three Interim Report to SBE	March 2010
Analyze Year Three performance and profile data/ primary data collection	August 6, 2010
Activities for conclusion of evaluation[2]	September 2012
Conclude analyses of process, leading and results data	
Convene advisory group to explore data and develop Conclusions and recommendations	

[1] Beginning with this task, the 2008-2009 cycle repeats for years 3, 4, and 5. To the extent possible, tasks will be conducted earlier than the 2007-2008 year.

[2] Activities will be conducted throughout fall semester

EOC Annual Budget for Palmetto Priority Schools Evaluation

Director of Evaluation (.45 FTE)
Administrative Assistant (.10 FTE)

Advisory Committee Meetings (2)	$ 2,000
Contractual Services (unspecified)	$ 50,000
Supplies, Postage	$ 2,000
Travel (2 trips to each school @ $100)	$ 3,200
Materials	$ 2,500
Printing	$ 5,000
Other Costs	$ 10,000
Total	$ 74,700 plus personnel